THE CLAIMS

The following is a complete list of all claims in this application.

1. (Previously Presented) A liquid crystal display (LCD), comprising:

a plurality of gate lines;

a plurality of data lines intersecting the gate lines;

a data driver generating data voltages for the data lines; and

a gate driver generating stepped-wave pattern gate signals for the gate lines, each stepped-wave pattern gate signal including;

a reset interval for converting a grayscale level of a pixel corresponding to a subsequent gate line to an extreme grayscale level;

a gate-on interval following the reset interval; and

an overshoot-interval following the gate-on interval and having the same polarity with a data voltage applied to the pixel.

2. (Previously Presented) The liquid crystal display of claim 1, wherein the first grayscale level is a black grayscale level when in a normally white mode.

3. (Previously Presented) The LCD of claim 1, wherein the extreme grayscale level in a normally black mode.

4. (Cancelled)

5. (Previously Presented) A drive method for a liquid crystal display (LCD), comprising:

sequentially applying stepped-wave pattern gate signals to the gate lines, each stepped-wave pattern gate signal comprising:

a reset interval converting a grayscale level of a pixel corresponding to a subsequent gate line to an extreme grayscale level,

a gate-on interval following the reset interval, and

an overshoot interval following the gate-on interval and having the same polarity with a data voltage applied to the pixel; and

applying the data voltage to the pixel.

6. (Cancelled)

7. (Previously Presented) The method of claim 5, wherein the gate signal in the reset interval has the same polarity with the gate signal in the overshoot interval.

8. (Previously Presented) The method of claim 5, wherein the gate signal in the reset interval has a different polarity from the gate signal in the overshoot interval.

9. (Previously Presented) The method of claim 5, wherein a voltage level of the gate signal in the overshoot interval is +3V to +10V relative to a gate-off voltage.

10. (Previously Presented) The method of claim 5, wherein the overshoot interval starts when the gate-on interval ends, and converts to a gate-off voltage when the gate-on interval doubles.

11. (Previously Presented) The method of claim 5, wherein the extreme grayscale level is a white grayscale level in a normally black mode.

12. (Previously Presented) The method of claim 5, wherein the extreme grayscale level is a black grayscale level in a normally white mode.

13. (Previously Presented) The method of claim 5, wherein a voltage level of the gate signal in the reset interval is +3V to +10V relative to a gate-off voltage.

14. (Previously Presented) The method of claim 5, wherein the reset interval starts about 0.5 μs after the gate-on interval starts.

15. (Previously Presented) A liquid crystal (LCD), comprising:

a gate driver generating a gate signal;

a data driver generating a first data voltage and a second data voltage;

a first gate line transmitting the gate signal;

a second gate line neighboring the first gate line and transmitting the gate signal;

a data line intersecting the first and second gate lines and transmitting the first data signal and the second data signal;

a first switching element connected to the first gate line and the data line and selectively transmitting the first data voltage to a first pixel;

a second switching element connected to the second gate line and the data line and selectively transmitting the second data voltage to a second pixel;

a first liquid crystal capacitance formed at the first pixel;

a second liquid crystal capacitance formed at the second pixel;

a storage capacitance formed between the second liquid crystal capacitance and the first gate line;

wherein the gate signal applied to the first gate line has a first interval having a first voltage converting a grayscale level of the second pixel to an extreme grayscale level, a second interval following the first interval and having a second voltage, a third interval following the second interval and having a third voltage and a fourth interval following the third interval and having a fourth voltage.

16. (Previously Presented) The LCD of claim 15, wherein the first switching element is turned on by the second voltage and turned off by the fourth voltage.

17. (Previously Presented) The LCD of claim 16, further comprising a common line providing a common voltage for the first liquid crystal capacitance and the second liquid crystal capacitance,

wherein the third voltage of the gate signal applied to the first gate line is greater than the fourth voltage when the first data voltage is higher than the common voltage, and the third voltage of the gate signal applied to the first gate line is lower than the fourth voltage when the first data voltage is less than the common voltage.

18. (Previously Presented) The LCD of claim 17, wherein both the first and the third voltages are higher or lower than the fourth voltage.

19. (Previously Presented) The LCD of claim 18, wherein the liquid crystal display operates in a normally white mode.

20. (Previously Presented) The LCD of claim 17, wherein one of the first and the third voltages is greater than the fourth voltage and the other is less than the fourth voltage.

21. (Previously Presented) The LCD of claim 20, wherein the liquid crystal display operates in a normally black mode.

22. (Previously Presented) The LCD of claim 16, wherein both the first and the third voltages are higher or lower than the fourth voltage.

23. (Previously Presented) The LCD of claim 22, wherein a level of the third voltage is between levels the first voltage and the fourth voltage.

24. (Previously Presented) The LCD of claim 16, wherein one of the first and the third voltages is greater than the fourth voltage and the other is less than the fourth voltage.

25 – 26. (Cancelled)